

Healing of an acute obstetric wound using a topical antimicrobial dressing containing silver

Margaret Wilson is Midwifery Sister, Lin Campbell is Tissue Viability Nurse, and Mr Makar Oak is Consultant Obstetrician and Gynaecologist, Wishaw General Hospital, Lanarkshire, Scotland

While obstetric wounds normally heal with little delay, in some instances complications can occur. This case illustrates one such instance and indicates the treatment pathway followed in order to achieve a successful outcome.

Clinical challenge:

- ▶▶ To reduce the bioburden in the wound
- ▶▶ To remove devitalised tissue
- ▶▶ To achieve moisture balance
- ▶▶ To avoid urinary contamination.

The patient

A 32-year-old primigravida of petite stature sustained an extensive perineal tear after a relatively short second stage of labour and subsequent SVD of a healthy baby. Assessment in theatre revealed a torn external sphincter, para-urethral tear and vaginal lacerations extending towards the lateral fornices. Silk sutures were used to repair the wounds at the time of surgery, however, difficulties arose and massive haemorrhaging occurred with major blood loss of >5 litres. Immediate post-intervention radiology was performed in order to achieve haemostasis and arrest bleeding.

The wound

At 3 weeks post natal the wound dehiscd and the tissue viability nurse (TVN) became involved. Wound assessment revealed a clinically infected and sloughy wound with high levels of purulent exudate present. Granulation tissue was minimal (Figure 1).

Wound management

Swabs were taken for culture and sensitivity, and antibiotics were commenced. Due to the traumatic birth and the visual impact of the wound, a psychological assessment was carried out. A nutritional assessment was also performed. Following discussion with the patient and consultant regarding the risks of possible urinary contamination of the wound, the decision was made to insert an indwelling Foleys catheter with a valve to minimise the risks of long-term bladder complications.

Aquacel® Ag was cut to shape to ensure close contact with the wound bed, with additional layers of secondary dressing (Aquacel®) applied on top. It is not usually necessary to cut Aquacel® Ag as the dressing is designed to minimise lateral wicking, however, in this instance it was the most suitable approach for the patient.

The outcome

The wound was reviewed weekly by the consultant, midwife and TVN. In between visits, the district nurse redressed the wound daily using the same dressing regime of Aquacel® Ag to the wound bed and Aquacel® dressing over the top to manage the exudate. At week 2 following assessment there was visible healing, identified by the presence of new granulation tissue and the reduction in the level of sloughy tissue present (Figure 2). Clinical infection was still evident and, following cultures, the antibiotics regime was changed accordingly. Daily dressing changes continued and physiotherapy commenced to strengthen the pelvic floor.

At week 4, the catheter was removed and by week 6 the wound had almost completely healed (Figure 3).

At this point, the patient was discharged from the care of the TVN and the family took a short break. Links were established with the community nurses at the holiday resort to ensure the patient received care during this time. The patient's husband was very supportive throughout both emotionally and nutritionally.

Discussion

This case study illustrates the difficulty in healing a wound to the perineum. Selection of an appropriate dressing along with short-term catheterisation in order to keep the wound free from urinary contamination was important in achieving a satisfactory outcome.

The choice of the Aquacel® Ag and Aquacel® Hydrofiber® dressings for their antimicrobial properties and exudate



Figure 1. Three weeks post-op, the wound dehiscd due to infection and is sloughy and exudating heavily.



Figure 2. At week 2 reassessment, new granulation tissue is forming.



Figure 3. At week 6 reassessment, the wound is almost completely healed.

handling capabilities combined with an effective and sensitive holistic, multidisciplinary approach to care were undoubtedly major components in achieving success and good clinical outcomes for this patient.

It is not usually necessary to cut Aquacel® Hydrofiber® dressings to the shape of the wound as they minimise lateral wicking due to their gel blocking capabilities. However, in awkward areas, cutting the dressing may enhance intimate contact of the dressing with the wound bed. Additional intimate contact with the wound is also achieved as the Hydrofiber® gels.

This patient, along with her supportive husband and extended family, assisted in a speedy recovery by accepting advice from the health care professionals who cared for her. Involvement of the multidisciplinary care team in any area of wound management may be instrumental.